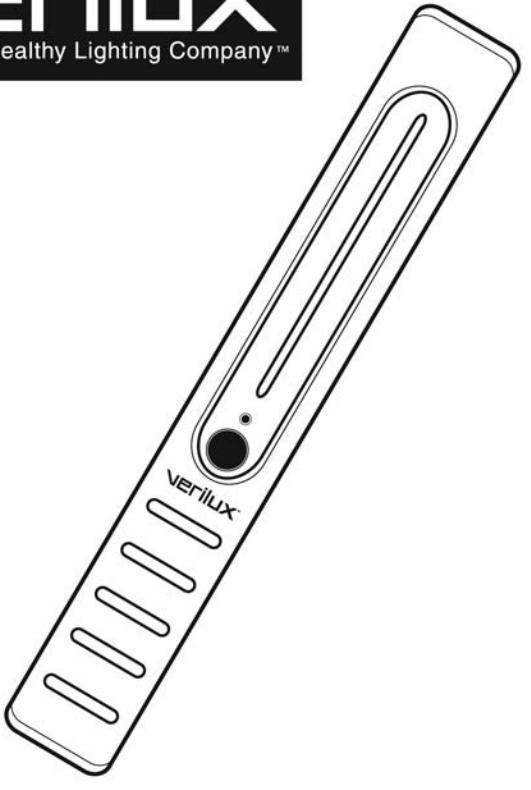
verilux®
The Healthy Lighting Company™



Sanitizing Travel Wand

with Verilux® SaniClean Lightwave Technology™

VH03

verilux®
LIFE IN A BETTER LIGHT®

Dear Customer,

Thank you for purchasing the Sanitizing Travel Wand with Verilux® SaniClean Lightwave Technology.™ You have received an innovative and quality manufactured product, backed by a one-year limited warranty. As a Verilux® customer, your satisfaction means everything to us. We look forward to serving you now and in the future.

Many other healthy lighting products are available through our catalog and online. Visit us on the web at www.Verilux.com to request a free catalog and learn more about all our quality Verilux® products, or call our toll-free number 1-800-454-4408.

Have a Bright Day!

Nicholas Harmon

Nicholas Harmon
President and CEO

FEATURES

Your new Verilux® Sanitizing Travel Wand is one of the best protections against dangerous viruses and bacteria residing on surfaces around you when you travel. The system features:

- A powerful Ultraviolet (UV-C) illumination system that eliminates bacteria, viruses, fungus and mold spores
- This system removes odors and dangerous allergens including dust mites that can cause pneumonia, asthma and other conditions
- Perfect for use on hotel bed clothes, chairs, restaurant cutlery and public restrooms
- Portable, hand-held design is easy to operate
- Fits neatly into purse or luggage

Safety feature:

- A safety switch will automatically turn the system off if the light source is turned upward, in order to protect eyes from exposure

WARNING!

- This unit should never be allowed to be handled by children under 15 years of age due to the danger of accidental direct exposure to UV rays.
- Always direct the UV rays AWAY from the eyes and skin.
- Never use this device on pets.
- It is highly recommended that UV resistant safety goggles (not included) be worn when using this device.

Guidelines for using the Verilux® Sanitizing Travel Wand

- Bedding/Matresses: hold Sanitizing Travel Wand approximately 4 inches from surface and gradually move the wand over the entire surface. Allow the light to stay on each area for 15-20 seconds to ensure optimum exposure.
- Personal hygiene items (brushes, toothbrushes, earrings, razors): Place items on counter and expose them to the UV light for 20 seconds at 2 inches from the surface of each item.
- Kitchen utensils: Place on counter AWAY FROM WATER and expose for 20 seconds at 3 inches away from the surface of each item.
- Counters and bathroom fixtures: Hold Sanitizing Wand 2–4" above the surface and allow UV light to expose surface for 20-30 seconds.

Other uses: Computer keyboards, telephone handsets, baby toys

OPERATION

Operating your Verilux® Sanitizing Travel Wand

1. Open battery compartment located on the underside of the handle area
2. Insert 4-AA alkaline batteries as indicated in battery cavity (batteries are not included)
3. Carefully replace cover making sure to slide it completely closed
4. While holding Wand with bulb facing down and away from skin or eyes, press the large blue button for 3 seconds (green light will flash). Press the blue button again to activate the UV-C light source (green light will glow and stop flashing).
5. Hold the Wand over the area to be sanitized at a height of 2" – 4" and slowly move the Wand over the entire area. Optimum exposure time for most surfaces is 20 seconds
6. In order to turn the Wand off, press the blue button until the green light goes out

Note: A safety switch will automatically turn off the wand if the light source is turned upward (it will go back on when the light source is once again lowered)

⚠ DANGER

Ultraviolet (UVC) Radiation Hazard.

Any exposure will cause significant eye damage and may cause skin damage.

Do not look into UV light source. Wear UV eye and skin protection.

LABORATORY RESULTS

Antimicrobial Activity Test (The tested surface is 3 cm/ Exposure time one minute)

Test Article	Telephone Receiver Surface (100 cm^2)	Computer Keyboard Surface (100 cm^2)	Office Desk Surface (100 cm^2)
Initial Count	1.1×10^3 (CFI/100 cm^2)	1.5×10^3 (CFI/100 cm^2)	1.6×10^5 (CFI/100 cm^2)
Number of Microbial Counts After UV Light Exposure	< 10 (CFU/100 cm^2)	< 20 (CFU/100 cm^2)	< 20 (CFU/100 cm^2)
Percent of Reduction of Microbial Content	99.1%	98.67%	99.76%

Antibacterial Activity Test

Name of Test Organism	Klebsella pneumoniae	Pseudomonas aeruginosa	Staphylococus aureus	Escherichia coli	Candida albicans	MRSA (Methicillin Resistance S.aureus)	Bacillus subtilis		Pencillium funiculosum
Initial Count (CFU.mL)	$1.34x10^5$	$1.28x10^6$	$1.52x10^5$	$1.5x10^5$	$1.67x10^5$	$1.26x10^5$	$1.44x10^5$		$1.8x10^5$
The Number of Test Organism After UV Light Exposure (CFU)	5 min	5 min	5 min	5 min	5 min	5 min	5 min		5 min
	< 10	$1.17x10^3$	< 10	40	$5.6x10^2$	< 10	3cm $1.27x10^2$	6cm $6.95x10^2$	$3.8x10^2$
Percent Reduction Of Test Organism	99.99%	99.91%	99.99%	99.97%	99.97%	99.99%	99.91%	99.52%	99.79%

Test Organism	Shoe In-Sole
Initial Count (CFU/40 cm^2)	$2.0x10^6$
After UV Light Exposure Under UV–C and for 20 Minutes (CFU/40 cm^2)	20 min
	$2.19x10^4$
Antimicrobial Activity	98.90%

WARNING **POTENTIAL MOLD SPORE RELEASE**

Application of UV-C light to existing mold growth can cause respiatory irritation and allergic symptoms. Do not use UV-C light where active mold growth exists. Remove active mold growth from surfaces prior to exposure.

FREQUENTLY ASKED QUESTIONS

What exactly is UV light?
Sunlight is actually electromagnetic radiation. The three types of light that reach the earth from the sun are ultraviolet, visible and infrared radiation. It is the ultraviolet, or UV, radiation that makes us feel warm when we are out in the sun, but it is also potentially the most damaging to our skin and eyesight. In terms of wavelength, visible light is a narrow band located between the UV past the dark purple color of visible light on one end, and infrared (IR) on the other end past the darkest visible red color.

Are there different kinds of UV light?
Yes, UV-A are the tanning rays of the sun, UV-B are the rays that cause sunburn, and UV-C are the most dangerous cancer-causing rays. All UV has the potential for damaging the skin. UV-A has the longest wavelength and penetrates the ozone layer of the earth's surface without any blockage. UV-B has a shorter wavelength and is somewhat absorbed by the ozone layer. UV-C is completely blocked by the ozone layer, except where there are holes in the layer (currently at the Earth's poles). UV-C is considered "germicidal UV" and is used in hospitals and laboratories to eliminate germs, mold, bacteria and viruses.

Is UV-C dangerous to use?
Under proper handling procedures, UV-C is completely safe. You should never allow the UV-C light to shine in your eyes or on your skin (even though you might not even know the light is on). Although there are numerous safety systems engineered in the Verilux HomeHealth™ product line, no child under 15 years of age should ever be allowed to use the product. The visible light blue light is attractive to children, so care must be taken not to allow them to play with any UV-C product.

How does UV-C work?
UV-C alters the DNA and RNA in germs, viruses, mold and bacteria so that they are not able to reproduce. Within a very short period of time (almost instantaneously) they die when exposed to UV-C illumination.

Does UV-C create ozone?
No. UV-C does not create ozone and does not damage the environment. Ozone is a toxic gas that is emitted by some ionizing air cleaners. Verilux SaniClean Lightwave Technology™ will not expose you to ozone.

Are there any surfaces that should not be exposed to UV-C light?
As mentioned previously, never allow the light to shine into you eyes or on exposed skin. Also, some plastics are adversely affected by exposure to UV-C light. Therefore, always avoid exposing electrical cords, plastic gaskets and seals to UV-C light.

FREQUENTLY ASKED QUESTIONS cont.

Has the use of UV-C been tested to eliminate disease causing germs, bacteria and viruses?
Yes. Extensive tests by Westinghouse Electric, General Electric, Penn State University and Harvard have demonstrated the effectiveness of UV-C light on microorganisms. UV-C systems have been tested commercially for more than 60 years and have demonstrated their effectiveness.

If I notice mold in my home, can I use Verilux SaniClean Lightwave Technology™ to eliminate it?
When mold is present, it should be cleaned with a suitable cleanser prior to treating it with Verilux SaniClean Lightwave Technology™. This will eliminate the danger of mold spores being formed and blown around the room.

How long should I expose a surface to Verilux SaniClean Lightwave Technology™?
Effective times vary, so please consult your Instruction Manual to determine correct exposures for various applications.

Can I use UV-C on my pet to eliminate odor and bacteria, since it has so much fur that its skin is not exposed?
No. You should never use UV-C to treat your pet.

How long should the bulb last?
The bulb should last for six years under normal use. The average life of a bulb is approximately 15,000 hours.

After treating a surface with UV-C, is there any residue that needs to be avoided?
Verilux SaniClean Lightwave Technology™ does not produce any residue and there is no waiting time between treatment and further exposure to the surface

Please visit our website at: **www.Verilux.com**

Call our Customer Service Department at

1-888-544-4865

Monday – Friday, 9 AM – 5 PM Eastern

340 Mad River Park, Waitsfield, VT 05673